Victaulic FireLock™ Innovative Groove System I IGS™ for 1"/DN25 Sprinkler Pipe







No. 142 Welded Outlet



Style 922 Outlet-T



Style 920N Mechanical-T Outlet



No. 101 Installation-Ready™ 90° Elbow



Style 108 Installation-Ready™ Installation-Ready™ Rigid Coupling



No. 102 Tee



Style 115 OGS x IGS™ Reducing Coupling



No. 148 Sprinkler Reducer, NPT or BSPT sprinkler outlet



of Run Fitting



Concentric Reducer



No. 145 Female NPT Grooved End OGS x IGS™ Grooved or BSPT Threaded x Groove 90° Elbow



No. 147 Back-To-Back sprinkler tee



No. 143 Close Nipple



Male NPT or BSPT Threaded x Groove Adapter



No 141 Female NPT or BSPT Threaded x Groove Adapter



No. 146 Cap



IGS™ Weld Plunger Cone



NAP-1 IGS™ Weld Plunger Cone



RG2100 Roll Grooving Tool



VicFlex[™] Series AH2-CC Braided Flexible Hose with Captured



VicFlex[™] Series AH1-CC Braided Flexible Hose with Captured Coupling (Refer to Coupling (Refer to publication 10.85) publication 10.95)

1.0 PRODUCT DESCRIPTION

Pipe Material

• Carbon steel, Schedule 10, Schedule 40. For use with alternative materials please contact Victaulic.

Maximum Working Pressure

• Up to 365 psi/2517 kPa/25 bar

Pipe Preparation

• Cut (Sch. 40) or roll (Sch. 10 or Sch. 40) grooved in accordance with publication 25.14: Victaulic IGS Groove Specifications.

RG2100 Grooving Capability

- 1"/DN25
- Workstation designed to cut, ream and form a roll groove on carbon steel, Sch. 10 or Sch. 40 pipe.
- This tool has a minimum pipe length requirement of 4 ½"/114 mm.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.	Location		Spec Section	Paragraph	
Submitted By	Date		Approved	Date	



2.0 **CERTIFICATION/LISTINGS**









Approvals listed above do not apply to the RG2100 Roll Grooving Tool.

SPECIFICATIONS - MATERIAL 3.0

Housing: Ductile iron conforming to ASTM A536, Grade 65-45-12

Housing Coating:

Orange enamel

Red enamel (Europe)

Optional: Hot dipped galvanized

Gasket:

Grade "E" EPDM (Type A) Vic-Plus™ Pre-lubricated Gasket

EPDM (Violet Color Code). Applicable for wet and dry (oil-free air) fire protection systems only. Listed/Approved for continuous use in wet and dry systems. Listed/Approved for dry systems at -40°F/-40°C and above. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.

- Reference should always be made to publication I-100, Victaulic Field Installation Handbook for gasket lubrication instructions.
- Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to publication 05.01, Victaulic Gasket Selection Guide for specific gasket service guidelines and for a listing of services which are not compatible.

Bolts/Nuts:

Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - heavy hex nuts) and ASTM A563M Class 9 (metric hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 Fe/Zn 5, finish Type III (imperial) or Type II (metric).

Coupling Linkage: High Strength Steel with comparable physical properties to that of the Track Bolt (ASTM A449). Linkage is zinc electroplated per ASTM B633 Fe/Zn 5, Type III Finish

No. 140, 141, 142, 143, 144, 148: Carbon steel meeting the chemical and mechanical property requirements of ASTM A53 Grade A, Type E or S

No. 65, 145, 146, 147: Ductile iron conforming to ASTM A536, Grade 65-45-12

No. WB-1: Steel Alloy

No. NAP-1: Aluminum Alloy

RG2100 Roll Grooving Tool:

Required Power Supply: Power Drive with Foot Switch (½ HP, Universal reversible motor, single-phase, 25-60 HZ) **Accessories/Components:**

Tool head assembly

Carriage assembly - accepts RG2100 tool head assembly, Standard Cutter, Standard Reamer and Standard Lever



4.0 DIMENSIONS

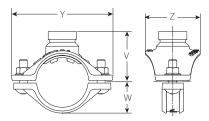
No. 142 Welded Outlet



Nomina	I	Actual Outside Diar	neter	Inside Diameter		Weight
inches DN		inches mm		I.D.	E to E	Approximate (Each)
Run x Branch		Run x Brar	nch	inches mm	inches mm	lb kg
1 1/4 - 1 1/2		1.660 – 1.900		1.049	1.00	0.2
DN32 - DN40		42.4 – 48.3		26.6	25.4	0.1
1½ – 2		1.900 – 2.375		1.049	1.00	0.2
DN40 - DN50		48.3 – 60.3		26.6	25.4	0.1
2 – 21/2	1	2.375 – 3.000	1.315	1.049	1.00	0.2
DN50 - DN65	X DN25	60.3 – 76.1	X 33.7	26.6	25.4	0.1
2½-3		2.875 - 3.500		1.049	1.00	0.2
DN65 - DN80		73.0 – 88.9		26.6	25.4	0.1
3 – 4		3.500 – 4.500		1.049	1.00	0.2
DN80 - DN100		88.9 – 114.3		26.6	25.4	0.1

4.1 DIMENSIONS

Style 922 Outlet-T

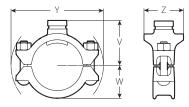


	Si	ze		Во	lt/Nut			Dimension	S			Weight
in	ominal oches DN	Outside in	ctual Diameter ches nm		Size	Minimum Hole Diameter/Hole Saw Size	Maximum Hole Diameter/ Hole Saw Size	Υ	V	w	Z	Approximate (Each)
Pun	x Branch	Puns	Branch		inches	inches	inches	inches	inches	inches	inches	lb
Null	A DIGITAL	ituii z	Diancii	Qty.	mm	mm	mm	mm	mm	mm	mm	kg
1 1/4 DN32		1.660 42.4		2	3/8 x 1 3/8	1 ³ / ₁₆ 30.0	1 ¼ 32.0	4.13 105.0	1.98 50.3	1.10 27.9	2.70 68.6	1.1 0.5
1½	-	1.900		2	3% x 1 3%	1 ³ / ₁₆	1 1/4	4.25	2.11	1.22	2.70	1.2
DN40 2	1	48.3 2.375	. 1.315	2	3% x 1 3%	30.0 1 ³ / ₁₆	32.0 1 ¼	108.0 4.75	53.6 2.34	31.0 1.46	68.7 2.56	0.5 1.2
DN50	X DN25	60.3	x 33.7	2	78 X I 78	30.0	32.0	120.6	59.4	37.1	65.1	0.5
2 1/2	-	2.875		2	3% x 1 3%	1 3/16	1 1/4	5.50	2.67	1.71	2.56	1.6
		73.0				30.0	32.0	139.7	67.8	43.4	65.1	0.7
DN65		76.1		2	3/8 x 13/8	1 ³ / ₁₆ 30.0	1 ¼ 32.0	5.52 140.3	2.75 69.8	1.71 43.4	2.56 65.1	1.7 0.8

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4.2 DIMENSIONS

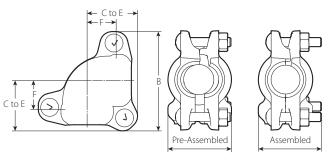
Style 920N Mechanical-T Outlet



	S	ze		Во	lt/Nut		Dimensions						
in	ominal oches DN	Outside inc	tual Diameter thes nm		Size	Minimum Hole Diameter/Hole Saw Size	Maximium Hole Diameter/ Hole Saw Size	Υ	V	w	Z	Approximate (Each)	
Run	x Branch	Runy	Branch		inches	inches	inches	inches	inches	inches	inches	lb	
Ituii 7	x branch	Mulix	Dianen	Qty.	mm	mm	mm	mm	mm	mm	mm	kg	
3		3.500		2	½ x 2¾	1 ½	1 5/8	6.42	3.12	2.28	2.75	2.7	
DN80	, 1	88.9	1.315		72 X Z 74	38.1	41.0	163.0	79.2	57.9	69.9	1.2	
4	X DN25	4.500	x 33.7	2	½ x 2¾	1 ½	1 5/8	186.6	3.62	2.69	2.75	3.0	
DN100		114.3			72 X Z 7/4	38.1	41.0	7.35	91.9	68.3	69.10	1.4	

4.3 DIMENSIONS

No. 101 Installation-Ready 90° Elbow



Si	Size Bolt/Nut			Dimensions						
Nominal	Actual Outside Diameter	Qty.	Size	F Take Out	C to E	В	Pre-Assembled	Assembled	Approximate (Each)	
inches	inches		inches	inches	inches	inches	inches	inches	lb	
DN	mm		mm	mm	mm	mm	mm	mm	kg	
1	1.315	2	³ / ₈ x 2	1.25	2.13	4.25	2.75	2.75	2.2	
DN25	33.7)	M10 x 50	32	54	108	70	70	1.0	

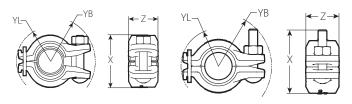
NOTE

• Not for use with grooved sprinklers, for grooved sprinkler connections please refer to <u>publication 10.65</u> for the Style V9 sprinkler coupling.

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4.4 DIMENSIONS

Style 108 Installation-Ready Rigid Coupling



Preassembled

Assembled

Si	Pipe End Separation ¹		Pipe End Separation ¹ Bolt/Nut					Dime	nsions				Weight
	Actual				Pre-Assembled					Assembled			
Nominal	Outside Diameter	Allowable	Qty.	Size	YL	YB	Х	Z	YL	YB	Х	Z	Approx (Each)
inches	inches	inches		inches	inches	inches	inches	inches	inches	inches	inches	inches	lb
DN	mm	mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
1	1.315	0.14	1	3/8 x 2	1.66	2.17	2.58	1.43	1.61	2.29	2.27	1.43	1.5
DN25	33.7	3.6		M10 x 50	42.2	55.2	65.5	36.3	41.0	58.2	57.5	36.3	0.7

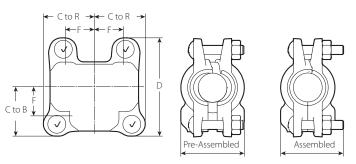
¹ The allowable pipe end separation dimension shown is for system layout purposes only. FireLockTM Style 108 rigid couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

NOTE

• Not for use with grooved sprinklers, for grooved sprinkler connections please refer to publication 10.65 for the Style V9 sprinkler coupling.

4.5 DIMENSIONS

No. 102 Installation-Ready Tee



5	Size Bolt/Nut					Dii	mensions			Weight
Nominal inches	Actual Outside Diameter inches	Qty.	Size inches	F Take Out inches	C to B	C to R	D inches	Pre-Assembled inches	Assembled inches	Approximate (Each)
DN	mm		mm	mm	mm	mm	mm	mm	mm	kg
1	1.315	4	3/8 x 2	1.25	2.13	2.13	4.13	2.75	2.75	3.0
DN25	33.7	4	M10 x 50	32	54	54	105	70	70	1.4

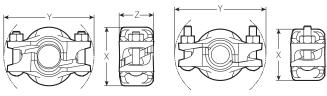
NOTE

• Not for use with grooved sprinklers, for grooved sprinkler connections please refer to publication 10.65 for the Style V9 sprinkler coupling.



4.6 DIMENSIONS

Style 115 OGS x IGS Reducing Coupling



Pre-Assembled

Assembled

			Pipe End					Dime	nsions				
	Size		Separation ² Bolt/Nut		Pre-Assembled A			Assembled		Weight			
No	minal		ctual e Diameter	Allowable	Qty.	Size	х	Υ	Z	х	Υ	Z	Approximate (Each)
in	iches	in	nches	inches		inches	inches	inches	inches	inches	inches	inches	lb
	DN		mm	mm		mm	mm	mm	mm	mm	mm	mm	kg
1 1/4		1.660		0.14		³⁄8 x 2	3.13	4.75	1.75	2.63	4.75	1.75	1.9
DN32	1	42.4	1.315	3.6	2	M10 x 50	79	121	44	67	121	44	0.9
1 ½	DN25	1.900	X 33.7	0.14		3⁄8 x 2	3.25	4.88	1.75	2.88	4.88	1.75	2.1
DN40		48.3		3.6	2	M10 x 50	83	124	44	73	124	44	0.9

² The allowable pipe end separation dimension shown is for system layout purposes only. FireLock[™] Style 115 rigid couplings are considered rigid connections and will not accommodate expansion or contraction of the piping system.

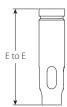
NOTE

• Not for use with grooved sprinklers, for grooved sprinkler connections please refer to <u>publication 10.65</u> for the Style V9 sprinkler coupling.



4.7 DIMENSIONS

No. 148 Sprinkler Reducer



Length	S	ize	Threaded (Outlet Size	Weight
E to E	Nominal	Actual Outside Diameter			Approximate (Each)
inches	inches	inches	inches	inches	lb
mm	DN	mm	DN	DN	kg
3	1	1.315	1/2	3/4	0.4
76	DN25	33.7	DN15	DN20	0.2
3.5	1	1.315	1/2	3/4	0.5
89	DN25	33.7	DN15	DN20	0.2
4	1	1.315	1/2	3/4	0.6
102	DN25	33.7	DN15	DN20	0.3
4.5	1	1.315	1/2	3/4	0.6
114	DN25	33.7	DN15	DN20	0.3
5	1	1.315	1/2	3/4	0.7
127	DN25	33.7	DN15	DN20	0.3
5.5	1	1.315	1/2	3/4	0.8
140	DN25	33.7	DN15	DN20	0.3
6	1	1.315	1/2	3/4	0.8
152	DN25	33.7	DN15	DN20	0.4
12	1	1.315	1/2	3/4	1.7
305	DN25	33.7	DN15	DN20	0.8
18	1	1.315	1/2	3/4	2.5
457	DN25	33.7	DN15	DN20	1.1
24	1	1.315	1/2	3/4	3.4
610	DN25	33.7	DN15	DN20	1.5
30	1	1.315	1/2	3/4	4.2
762	DN25	33.7	DN15	DN20	1.9

NOTE

- NPT or BSPT available
- It is acceptable to cut and groove any No. 148 longer than 6"/152mm. The minimum allowable cut length is 6"/152mm for a No. 148.

No. 148 Double Ended Sprinkler Reducer



Length	S	ize	Threaded	Outlet Size	Weight
E to E	Nominal	Actual Outside Diameter			Approximate (Each)
inches	inches	inches	inches	inches	lb
mm	DN	mm	DN	DN	kg
36	1	1.315	1/2	3/4	5.0
914	DN25	33.7	DN15	DN20	2.3

NOTE

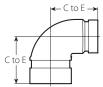
• 36"/914mm size features sprinkler outlet on both ends for field fabrication.

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4.8 DIMENSIONS

No. 65 IGS Grooved End of Run Fitting



	Si	ze		Dimensions	Weight
No	minal		ctual e Diameter	C to E	Approximate (Each)
in	ches	in	iches	inches	lb
	DN		mm	mm	kg
1 1/4		1.660		1.88	0.7
DN32		42.4		48	0.3
1 ½		1.900		2.00	0.8
DN40		48.3	_	51	0.4
2	, 1	2.375	1.315	2.25	1.2
DN50	X DN25	60.3	X 33.7	57	0.5
2 ½		2.875		2.50	1.6
		73.0	_	64	0.7
3		3.500		2.75	2.6
DN80		88.9		70	1.2

4.9 DIMENSIONS

No. 144 OGS x IGS Grooved Concentric Reducer

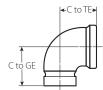


	Si	ze		Dimensions	Weight
No	minal		ctual Diameter	E to E	Approximate (Each)
in	iches	in	ches	inches	lb
	DN		mm	mm	kg
1 1/4		1.660		3.00	0.5
DN32	, 1	42.4	1.315	76	0.2
1 ½	X DN25	1.900	X 33.7	3.00	0.6
DN40		48.3		76	0.2



4.10 DIMENSIONS

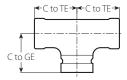
No. 145 Female Threaded x Groove 90° Elbow



Size				Dimensions		Weight
Nomi inch DN	es	Actual Outside Diameter inches mm		C-TE	C-GE	Approximate (Each)
Threaded Outlet	Grooved Outlet	Threaded Outlet	Grooved Outlet	inches mm	inches mm	lb kg
½ DN15		0.840 21.3		1.45 36.8	1.60 40.6	0.5 0.2
³ / ₄ DN20	x 1 N25	1.050 26.9	x 1.315 x 33.7	1.45 36.8	1.60 40.6	0.5 0.2
1 DN25		1.315 33.7		1.50 38.1	1.60 40.6	0.5 0.2

4.11 DIMENSIONS

No. 147 Back-To-Back Sprinkler Tee



Size						Dimensions		Weight
	Nominal		Actual Outside Diameter					
	inches DN			inches mm			C-GE	Approximate (Each)
Threaded Outlet	Threaded Outlet	Grooved Outlet	Threaded Outlet	Threaded Outlet	Grooved Outlet	C-TE inches mm	inches	lb kg
1/2	1/2	1	0.840	0.840	1.315	1.75	1.60	0.7
DN15	DN15	X DN25	21.3	x 21.3	X 33.7	44.5	40.6	0.3

NOTE:

• Approved for use with one or two ½" NPT Sprinklers threaded directly into outlet connection(s).



4.12 DIMENSIONS

No. 143 Close Nipple



Si	ze	Dimensions	Weight
Nominal	Actual Outside Diameter	E to E	Approximate (Each)
inches	inches	inches	lb
DN	mm	mm	kg
		1.5 ³	0.2
		38	0.1
		2	0.3
		51	0.1
		2.5	0.4
		64	0.2
		3	0.4
1	1.315	76	0.2
DN25	33.7	3.5	0.5
		89	0.2
		4	0.6
		102	0.3
		4.5	0.6
		114	0.3
		5	0.7
		127	0.3

³ Bolt pad interferences may occur in some installation configurations.

4.13 DIMENSIONS

No. 140 Male Threaded x Groove Adapter



Si	ze	Dimensions	Weight
Nominal	Actual Outside Diameter	E-E	Approximate (Each)
inches	inches	inches	lb
DN	mm	mm	kg
1	1.315	2.50	0.3
DN25	33.7	63.5	0.1

No. 141 Female Threaded x Groove Adapter



Si	ze	Dimensions	Weight
Nominal	Actual Outside Diameter	E-E	Approximate (Each)
inches	inches	inches	lb
DN	mm	mm	kg
1	1.315	2.00	0.5
DN25	33.7	50.8	0.2



4.14 DIMENSIONS

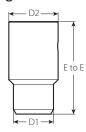
No. 146 Cap



S	ize	Dimensions	Weight
Nominal	Actual Outside Diameter	Т	Approximate (Each)
inches	inches	inches	lb
DN	mm	mm	kg
1	1.315	0.55	0.2
DN25	33.7	14.0	0.1

4.15 DIMENSIONS

WB-1 Weld Plunger Cone



	Weight		
E to E	D1	D2	Approximate (Each)
inches	inches	inches	lb
mm	mm	mm	kg
3.75	1.63	2.00	2.2
95.3	41.3	50.8	51.0

NOTE

• WB-1 Weld Plunger Cones are for use with the No. 142 weld outlets and protect the groove during weld process.

4.16 DIMENSIONS

NAP-1 Weld Plunger Cone



	Weight		
E to E	D1	D2	Approximate (Each)
inches	inches	inches	lb
mm	mm	mm	kg
1.75	1.88	1.50	0.3
44.5	47.6	38.0	0.2

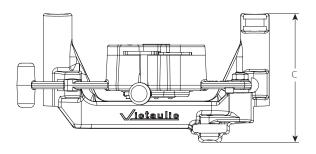
NOTE

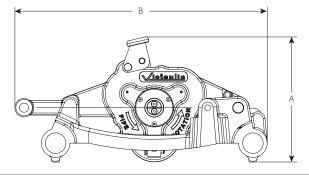
NAP-1 Weld Plunger Cones are for use with the No. 142 weld outlets and protect the groove during weld process.



4.17 DIMENSIONS

RG2100 Roll Grooving Tool





Α	В	С	Tool Weight
inches	inches	inches	lb
mm	mm	mm	kg
8.5	17.1	8.7	37.5
216	435	222	17.0



5.0 PERFORMANCE

Friction Flow Data

		Si	ze			Equivalent Length of 1" Sch. 40 Pipe (C=120)							
	minal ches		Actual Outside Diameter inches				No. 101	No. 102 (Branch) feet	No. 102 (Run)	Style 115	No. 148	No. 144	
	ones DN			.nes ım		Style 922	Style 920N	meters	meters	feet meters	feet meters	feet meters	feet meters
1 DN25			1.315 33.7			See publication 10.52	See publication 11.02	2.0 0.61	5.0 1.52	2.7 0.82	-	See note	-
1 ¼ DN32	x DI	l 125	1.660 42.4	х	1.315 33.7	_	-	-	-	-	5.7 1.74	-	3.9 1.19
1 ½ DN40			1.900 48.3			-	-	-	-	-	5.0 1.52	-	4.3 1.31

NOTE



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[•] In accordance with NFPA 13, friction loss shall be excluded for fittings directly connected to a sprinkler. For hydraulic calculations, Victaulic recommends using the installed length (E-E or cut length) of the No. 148 Sprinkler Reducer as the equivalent length of 1*/DN25 Sch. 40 pipe.

5.0 PERFORMANCE (CONTINUED)

Maximum Working Pressure

	cULus	FM	LPCB	VdS
	psi	psi	psi	psi
	kPa	kPa	kPa	kPa
Style/No.	bar	bar	bar	bar
142 ⁴	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
922 ⁴	300	300	365	232
	2100	2100	2517	1600
	21	21	25	16
920N ⁴	365	300	365	232
	2517	2100	2517	1600
	25	21	25	16
1015	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
108 ⁵	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
102 ⁵	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
115 ⁴	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
148	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
65	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
144	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
145	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
147	365	365		
	2517	2517	N/A	N/A
	25	25		
143	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
140	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
141	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16
146	365	365	365	232
	2517	2517	2517	1600
	25	25	25	16

Maximum pressure rating is 300 psi/21 bar when installed on lightwall steel pipe, as follows:



Mega-Flow and Mega-Flow-GF steel pipe manufactured by Wheatland Tube Co.

Mega-Thread steel pipe manufactured by Wheatland Tube Co.

MLT steel pipe manufactured by Wheatland Tube Co.

WLS steel pipe manufactured by Wheatland Tube Co. Eddy Flow steel pipe manufactured by Bull Moose Tube Co.

Eddythread steel pipe manufactured by Bull Moose Tube Co.

EZ-Thread steel pipe manufactured by Youngstown Tube Co.

Fire-Flo steel pipe manufactured by Youngstown Tube Co.

Easy-Flow pipe manufactured by Borusan Mannesmann

Maximum pressure rating is 300 psi / 21 bar when installed on lightwall steel pipe, as follows:

Mega-Thread steel pipe manufactured by Wheatland Tube Co.

MLT steel pipe manufactured by Wheatland Tube Co

WLS steel pipe manufactured by Wheatland Tube Co

Eddythread steel pipe manufactured by Bull Moose Tube Co.

EZ-Thread steel pipe manufactured by Youngstown Tube Co.

6.0 NOTIFICATIONS



WARNING

- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- . Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

- These products shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA 13, 13D, 13R, etc.) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- The installer shall understand the use of this product and why it was specified for the particular application.
- . The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the system designer's responsibility to verify suitability of materials for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on materials to confirm system life will be acceptable for the intended service.

Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

A WARNING



Failure to follow instructions and warnings could result in serious personal injury, property damage, and/or product damage.

- Before operating or servicing any grooving tools, read all instructions in the manual and all warning labels on the tool.
- Wear safety glasses, hardhat, foot protection, and hearing protection while working around the tool.
- Save the operating and maintenance manual in a place accessible to all operators of the tool

If you need additional copies of any literature, or if you have questions concerning the safe and proper operation of the tool, contact Victaulic, P.O. Box 31, Easton, PA 18044-0031, Phone: 1-800-PICK VIC, E-Mail: pickvic@victaulic.com.



7.0 REFERENCE MATERIALS

10.06: FireLock Installation-Ready Fittings

10.52: Style 922 Outlet Tee

10.85: VicFlex Series AH2 ad AH2-CC Braided Hose

11.02 Mechanical-T Bolted Branch Outlets

25.14: Victaulic IGS Groove Specification

I-101-103: FireLock™ Installation-Ready™ Fittings Installation Instruction

I-102: FireLock™ Installation-Ready™ Fittings Installation Instruction

I-108: FireLock™ Installation-Ready™ Coupling

I-115: FireLock EZ™ Installation-Ready™ Reducing Coupling Installation Instruction

I-ENDCAP: Victaulic End Cap Installation Safety Instructions

I-V9: Style V9 Victaulic FireLock™ IGS™ Installation-Ready™ Sprinkler Coupling

TM-RG2100: Operating and Maintenance Instructions Manual

	Victaulic No. 148					
Length	½" DN15 outlet	3/4" DN20 outlet				
E to E	Equivalent I Sched. 40 P	Length of 1" Pipe (C=120)				
inches	fe	et				
mm	me	ters				
≤6	6.6	3.8				
152	2.0	1.2				
6 – 12	5.5	3.8				
152 – 305	1.7	1.2				
12 – 18	6.2	4.3				
305 – 457	1.9	1.3				
18 – 24	6.7	4.7				
457 – 610	2.0	1.4				
24 – 30	7.1	5.2				
610 – 762	2.2 1.6					
30 – 36	7.4 5.4					
762 – 914	2.3	1.6				

NOTE

• When installed in pipe to pipe connections or it is required by the authority having jurisdiction, the equivalent length data in the table above may apply

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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Note

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

Installation

Reference should always be made to the <u>Victaulic installation handbook</u> or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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